

2024 Coal Combustion Product (CCP) Production and Use Survey

Beneficial Utilization versus Production Totals (Short Tons)									
2024 CCP Categories	Fly Ash	Bottom Ash	Boiler Slag	FGD Gypsum	FGD Material Wet Scrubbers	FGD Material Dry Scrubbers	FGD Other	FBC Ash	CCP Total Production / Utilization Totals
Total CCPs Produced by Category	24,718,600	7,666,800	1,580,936	16,860,200	5,122,215	1,687,795	52,602	5,885,300	63,574,448
Total CCPs Used by Category	19,386,568	2,720,561	889,947	17,142,322	0	6,388	7,255	5,885,300	46,038,342
CCP Type / Application									
1. Concrete/Concrete Products /Grout	14,593,135	379,959		10,155					14,983,249
2. Blended Cement/ Feed for Clinker	3,364,973	474,525		1,501,065		5,819			5,346,382
3. Flowable Fill	11,532								11,532
4. Structural Fills/Embankments	97,871	175,649							273,521
5. Road Base/Sub-base	102,199	218,181						12,539	332,919
6. Soil Modification/Stabilization	194,112	7,332							201,444
7. Mineral Filler in Asphalt						569			569
8. Snow and Ice Control		13,324	155						13,479
9. Blasting Grit/Roofing Granules		178,325	834,866						1,013,191
10. Mining Applications		11,592						5,443,670	5,455,262
11. Gypsum Panel Products (formerly Wallboard)				12,875,501					12,875,501
12. Waste Stabilization/Solidification	14,517								14,517
13. Agriculture				730,602					730,602
14. Aggregate	2,694	257,293							259,988
15. Oil/Gas Field Services	9,345						7,255		16,600
16. CCR Pond Closure Activities		7,364							7,364
17. Miscellaneous/Other	996,190	997,017	54,926	2,024,999				429,090	4,502,222
Summary Utilization to Production Rate									
2024 CCP Categories	Fly Ash	Bottom Ash	Boiler Slag	FGD Gypsum	FGD Material Wet Scrubbers	FGD Material Dry Scrubbers	FGD Other	FBC Ash	CCP Total Utilization Total
Totals by CCP Type/Application	19,386,568	2,720,561	889,947	17,142,322	0	6,388	7,255	5,885,300	46,038,342
Category Use to Production Rate (%)	78%	35%	56%	102%	0%	0%	14%	100%	72%

Total CCP production for Fly Ash, Bottom Ash, FGD Gypsum, and FBC Ash is taken directly from the Ash Mart, which is based on the EIA's 2024 data for coal power plants. Production estimates for Boiler Slag and the Wet, Dry, and Other categories are derived using the 10-year average results from the 2014–2023 surveys, benchmarked against the Ash Mart totals for Bottom Ash and FGD Gypsum. The 17 individual CCP category estimates presented in this report are calculated from the responses to the "2024 Coal Combustion Product (CCP) Production and Use Survey." Special thanks to all survey participants.